

**REMARKS**

The Office Action of September 26, 2006, has been carefully reviewed and this response addresses the concerns stated in the Office Action. All objections and rejections are respectfully traversed.

**I. STATUS OF THE CLAIMS**

Claims 1, 3, 4, 7-14, 17, 18, 21, 22, and 24-47 are pending in the application.

Claims 2, 5, 6, 15, 16, 19, 20, and 23 have previously been canceled.

Claim 18 has been objected to as being dependent on rejected base claims, but would be allowable if rewritten to include all the limitations of its respective base claim and any intervening claims.

Claims 41 and 44-45 have been rejected under 35 U.S.C. § 103(a) as being obvious over Mankoff, U.S. Patent No. 6,385,591, filed on May 11, 1999, issued on May 7, 2002 (Mankoff) in view of Sharma, U.S. Patent No. 6,766,163, filed on December 9, 1999, issued on July 20, 2004 (Sharma). Applicants respectfully point out that Mankoff issued almost a year after the filing date of Applicants' application (August 15, 2001), and that Sharma issued over three years after the filing of Applicants' application. Applicants reserve the right to swear behind Mankoff and/or Sharma under 37 C.F.R. § 1.131.

Claims 1, 3, 4, 8-14, 17, 21, 22, 24-43, and 46-47 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Mankoff in view of Sharma, and in further view of Treyz et al., U.S. Patent No. 6,587,835, issued July 1, 2003, filed February 9, 2000 (Treyz). Applicants respectfully point out that Treyz was issued almost two years after the Applicants' filing date. Applicants reserve the right to swear behind Treyz under 37 C.F.R. § 1.131.

Applicants respectfully point out that the Office Action states no rejection for claim 7, and therefore allowance is earnestly solicited.

## II. CLAIM REJECTIONS UNDER 35 U.S.C. § 103

The Office Action has rejected claims 1, 3-4, 8-14, 17, 21, 22, and 24-47 under 35 U.S.C. § 103(a) as being unpatentable over Mankoff in view of Sharma, and, for certain claims, in further view of Treyz. The Office Action cites Sharma as disclosing formatting, by the transmitter, the advertising information into XML. The Office Action cites Treyz as disclosing conveying a transmitted signal to a handheld device located within a context.

On pages 2-4, the Office Action has rejected claims 41 and 44-45 under 35 U.S.C. § 102(e) as being obvious over Mankoff in view of Sharma.

With respect to claims 41 and 44, it is submitted that Mankoff and Sharma, either separately or in combination, do not make obvious Applicants' claimed formatting, by the transmitter, contextually-relevant information because (1) Mankoff does not disclose that the server is performing any formatting whatsoever, and (2) Sharma's formatting is performed in the mobile unit, not in a transmitter. With respect to (1), Mankoff states that the virtual coupons are served with web pages in a conventional manner. Conventionally, web pages are formatted by web page designers and are provided to a server already formatted. In conventional systems, the server simply delivers the web page directly to the client when a request for the page is received. In Mankoff, a provider stores virtual coupons in a database that is accessible to the server. The server then accesses the database to serve the virtual coupons along with the web page. Since Mankoff describes this process as conventional, and since Mankoff nowhere mentions that the server formats anything at all, a person of skill in the art would be led to the conclusion that the web pages and virtual coupons are formatted by the provider. With respect to (2), Sharma states that the mobile station, which receives teletext information from the server, includes a controller that is configured to format the teletext information (Sharma, col. 3, lines 15-23 and col. 6, lines 9-17). Sharma does not make obvious Applicants' claimed formatting in the transmitter because Sharma's server, which includes a controller (Sharma, col. 2, line 43), is not disclosed to perform formatting. Sharma's discussion about the use of XML does not make obvious Applicants' claimed formatting in the transmitter because Sharma states that the teletext messages are formatted according to XML (Sharma, col. 4, line 56) and elsewhere states that the formatting is done in the mobile station as described above. Thus, neither Mankoff's server nor Sharma's

server, each of which the Office Action seems to have analogized to Applicants' claimed transmitter, makes obvious Applicants' claimed formatting by the transmitter the contextually-relevant information because (1) in the case of Mankoff, by the time the server receives the information, it is already formatted, and (2) in the case of Sharma, the mobile station performs the formatting. For these reasons, it is submitted that claims 41 and 44 are not made obvious by Mankoff and Sharma, either combined or individually.

It is submitted that dependent claim 45 is not made obvious by Mankoff and Sharma at least because of its dependence upon independent claim 44, which Applicants' believe to be allowable as stated above.

On pages 4-10, the Office Action states that claims 1, 3-4, 8-14, 17, 21, 22, 24-43, and 46-47 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Mankoff in view of Sharma, and in further view of Treyz.

With respect to claim 1, it is submitted that Mankoff, Sharma, and Treyz, either individually or combined, do not make obvious Applicants' claimed means for defining a context in said transmitter because Mankoff states the information included in a virtual coupon in FIG. 3, and that "*providers* of virtual coupons preferably store those coupons in the database" (Mankoff, col. 3, lines 62-63) [Emphasis added], from which the virtual coupon is drawn and served to the client. Because Mankoff's "providers" are different from Mankoff's web server (Mankoff states, the server "may provide the virtual coupon service for a fee", in other words, providers may pay for the service of having the server present their virtual coupons to the client), it is submitted that if any context is being defined in Mankoff, it is being done at the *provider*, not at the server. Thus, because neither Mankoff nor Treyz discloses or suggests Applicants' claimed means for defining a context in a *transmitter*, it is submitted that claim 1 is not obvious under 35 U.S.C. § 103.

With respect to claims 1, 9, 29, 34, and 37, it is submitted that Mankoff, Sharma, and Treyz, either individually or in combination, do not make obvious Applicants' claimed information formatted by the transmitter for the reasons stated above with respect to claims 41 and 44.

With respect to independent claims 1, 9, 25, 29, 34, and 37 and their dependent claims, it is submitted that nowhere in either Mankoff or Treyz is there a suggestion that Mankoff could be modified to include the capabilities of Treyz because Mankoff nowhere suggests an association between the reception of coupons and the range of the retail store, and Treyz nowhere suggests a centralized server such as Mankoff states for distributing coupons. *Uniroyal v. Rudkin-Wiley*, 5 U.S.P.Q.2d 1434, 1438 (Fed. Cir. 1988) teaches that for prior art references to be combined to render obvious a subsequent invention under 35 U.S.C. § 103, there must be something in the prior art as a whole that suggests the desirability, and thus the obviousness, of making the combination, and that the Office Action must point to a teaching in the art that supports the combination or modification for the rejection to stand. *In re Fritch*, 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992) teaches that the mere fact that a prior art structure could be modified to produce the claimed invention would not have made the modification obvious unless the prior art suggested the desirability of the modification. Thus, because there is no suggestion in the prior art of the desirability to modify Mankoff according to Treyz, it is submitted that independent claims 1, 9, 25, 29, 34, and 37 and their dependent claims are not made obvious under 35 U.S.C. § 103 by Mankoff, Treyz, or their combination.

With respect to claim 3, it is submitted that none of Mankoff, Sharma, Treyz, or Official Notice make obvious Applicants' claimed diffuse infrared signal having a wavelength substantially in the range of 850 nanometers to 1250 nanometers because the infrared spectrum spans 750 nanometers to 25 micrometers ( $10^{13} - 4 \times 10^{14}$  Hz), and nowhere does either reference disclose or suggest a particular range within the infrared spectrum that accommodates their technologies. It is submitted that it is not instantly and unquestionably demonstrated as being well-known in the art that Applicants' claimed wavelength range would be used in the systems of any of Mankoff, Sharma, or Treyz. (According to the MPEP, § 2144.03, it would not be appropriate for the examiner to take official notice of facts without citing a prior art reference where the facts asserted to be well known are not capable of instant and unquestionable demonstration as being well-known [Emphasis in original].) It is also submitted that there is no evidence in the record to support an assertion of common knowledge (or Official Notice), nor is the basis for such reasoning set forth explicitly, nor are factual findings predicated on sound

technical and scientific reasoning presented in the Office Action. The MPEP further states that there must ordinarily be some form of evidence in the record to support an assertion of common knowledge, and that if such notice is taken, the basis for such reasoning must be set forth explicitly, and the Office Action must provide specific factual findings predicated on sound technical and scientific reasoning. It is therefore submitted that claim 3 is not made obvious by Mankoff, Sharma, and Treyz under 35 U.S.C. § 103.

With respect to claims 4, 11, 24, 28, and 32, it is submitted that it is not inherent in either Mankoff, Sharma, or Treyz that Applicants' claimed diffuse infrared signal is generated by modulating an electric light because an infrared signal can be generated in many ways. The general rule of inherency may not be relied upon because the consequences of following any of Mankoff, Sharma, or Treyz does not always inherently produce Applicants' claimed diffuse infrared signal that is generated by modulating an electric light. Further, there is not a reasonable certainty that Applicants' claimed diffuse infrared signal generated by an electric light will necessarily result from any of Mankoff, Sharma, or Treyz or their combination because none of them gives any indication whatsoever concerning the generation of the infrared signal. Finally, the Office Action provides no basis in fact and/or technical reasoning to support the determination that the generation of a diffuse infrared signal by modulating an electric light necessarily flows from the teachings of Mankoff, Sharma, or Treyz. For these reasons, it is submitted that claims 4, 11, 24, 28, and 32 are not made obvious by Mankoff, Sharma, or Treyz or their combination under 35 U.S.C. § 103.

It is submitted that dependent claim 7 is not made obvious under 35 U.S.C. § 103 at least based on its dependence on independent claim 1.

With respect to claims 8, 10, 22, 33, and 38, it is submitted that none of Mankoff, Sharma, or Treyz nor their combination discloses or suggests Applicants' claimed handheld device having a means for extracting including a plug-in that executes when an interest is expressed because, while Mankoff states that both Mankoff's "*representative web client*" (a personal computer, as distinguished from a handheld device in Mankoff, col. 3, lines 16-17) and Mankoff's *server* can support application plug-ins (Mankoff, col. 3, lines 8 and 15), Mankoff

nowhere discloses or suggests that Mankoff's *handheld device* supports plug-ins. Mankoff states that the handheld device typically includes a handheld stylus for inputting information to the device and synchronization software, and that representative PDA devices include a x86-, PowerPC™ or RISC-based processor, a realtime operating system such as WindRiver VXWorks™, QSSL QNXNeutrino™, PalmOS, or Microsoft Windows CE, a Web browser or other graphics viewer, device drivers, control software, a modem, non-volatile memory, and system memory (Mankoff, col. 3, lines 19-33). However, Mankoff does not disclose or suggest Applicants' handheld device having a means for extracting that includes a plug-in. Neither do either Sharma or Treyz disclose or suggest Applicant's claimed plug-in. It is therefore submitted that claims 10, 22, 33, and 38 are not made obvious by any of Mankoff, Sharma, or Treyz or their combination under 35 U.S.C. § 103.

It is submitted that dependent claims 12-14 are not made obvious at least based on their dependence on independent claim 9.

With respect to claims 17 and 40, it is submitted that Mankoff and Sharma do not disclose or suggest Applicants' claimed integrity element that includes a second XML element, or Applicants' claimed encapsulating an XML element in an integrity XML element, because (1) Mankoff's verifying code examples, checksum, watermark, etc., are not disclosed to contain any XML whatsoever, and (2) Sharma's XML code is limited to teletext messages, but there is no disclosure whatsoever of an integrity element being formatted in XML. Treyz does not disclose or suggest such a capability either.

It is submitted that dependent claim 21 is not made obvious at least based on its dependence on independent claim 25.

With respect to claims 25 and 39, it is submitted that Mankoff and Sharma do not disclose or suggest Applicants' claimed information being of interest to the user of the handheld device *if the handheld device is located within the coverage area* because, in the system of Mankoff, the user receives virtual coupons based on the user's access of a web site that has previously been associated with the coupons, but there is no association in Mankoff between the

location of the handheld device with respect to the coverage area of the transmitter and the user's interest level in the virtual coupons. Mankoff does not disclose or suggest any relationship between transmitted information and Applicants' claimed coverage area at all. Further, as explained above, nowhere in either Mankoff, Sharma, or Treyz is there a suggestion that Mankoff and Sharma could be modified to include the capabilities of Treyz. For these reasons, it is submitted that Applicants' claims 25 and 39 are not made obvious by any of Mankoff, Sharma, or Treyz or their combination under 35 U.S.C. § 103.

With respect to claims 26-27 and 36, it is submitted that none of Mankoff, Sharma, or Treyz nor their combination discloses or suggests Applicants' claimed emitting a time element associated with an XML element, an integrity element, and temporal context for the user because, in Mankoff, (1) the virtual coupon's expiration date is a characteristic of the coupon, and thus Mankoff is not performing Applicants' claimed emitting of the time element, and (2) the coupon's expiration date is unrelated to any of an XML element, an integrity element, or a temporal context for the user because the expiration date is simply a part of the virtual coupon information. In neither Sharma nor Treyz there is no reference whatsoever to Applicants' claimed emitting a time element in conjunction with an XML element and an integrity element because Sharma's and Treyz's references to time are limited to setting timers for user responses or reminders, or time-tagging information, activities which are not related to Applicants' claimed XML element nor Applicants' claimed integrity element. It is therefore submitted that claims 26-27 and 36 are not made obvious by Mankoff, Sharma, or Treyz, or their combination under 35 U.S.C. § 103.

With respect to claims 30, 43, and 46, it is submitted that neither Mankoff nor Sharma nor their combination makes obvious Applicants' claimed broadcast XML element or broadcast signal having contextually-relevant information because (1) the Office Action states that Mankoff fails to disclose means for conveying a transmitted signal from a transmitter to a handheld device located within a context (Office Action, pages 5, 6, 8, and 9), and Sharma has no capability for transmitting contextually-relevant information. With respect to claim 30, Mankoff, Sharma, and their combination do not make obvious Applicants' claimed broadcast signal having an integrity XML element encapsulating a broadcast XML element because neither

Mankoff nor Sharma discloses or suggests an integrity XML element encapsulating a broadcast XML element. With respect to claims 43 and 460, none of Mankoff, Sharma, or Treyz discloses or suggests Applicants' claimed packaging by the transmitter formatted contextually-relevant information into a broadcast signal because (1) none of the references format at the transmitter, and (2) Sharma's broadcast signal does not contain contextually-relevant information, and there is no suggestion or motivation stated any of the references for Mankoff to be modified to include both Treyz and Sharma. For these reasons, it is submitted that Applicants' claims 30, 43, and 46 are not made obvious by Mankoff and Lake under 35 U.S.C. § 103.

It is submitted that dependent claim 31 is not made obvious at least based on its dependence on independent claim 29, that dependent claim 35 is not made obvious at least based on its dependence on independent claim 34, and that dependent claim 42 is not made obvious at least based on its dependence on independent claim 41, and that dependent claim 47 is not made obvious at least based on its dependence on independent claim 44.

#### IV. ALLOWABLE SUBJECT MATTER

The Office Action states that claim 18 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims.

On pages 10-11, the Office Action states that the reason for allowance for claim 18 is that the prior arts fail to disclose "said integrity element includes a checksum value, said checksum value representative of said information; a size value, said size value indicating the size of said information; a seed value, said seed value being used in computing said checksum value, and an operator, said operator being used in conjunction with said size value and said seed value to compute said checksum value", as cited in the claim.

It is submitted that claim 18 is not made obvious under 35 U.S.C. § 103 based, at least, on its dependence upon claim 9, as argued above.

## V. CONCLUSION

It is submitted that claims 1, 3, 4, 7-14, 17, 18, 21, 22, and 24-47 are now in condition for allowance.

Applicants respectfully request that the Examiner withdraw all rejections and objections, and find claims 1, 3, 4, 9-14, 17, 18, 21, 22, and 24-47 allowable for the reasons stated above, and further respectfully request that a timely Notice of Allowance be issued in this case.

Applicants respectfully point out that, since no rejection has been stated for claims 7 and 8,

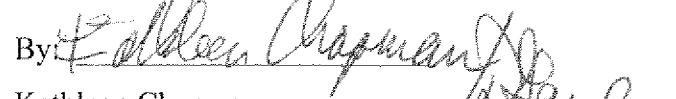
Applicants assert that these claims have not been made obvious under 35 U.S.C. § 103.

Although no new fees are anticipated, the Commissioner for Patents is authorized to charge any additional fees or credit overpayment to Deposit Account No. 03-2410, Order No. 12078-141.

The following information is presented in the event that a call may be deemed desirable by the Examiner:      KATHLEEN CHAPMAN (617) 345-3210

Respectfully submitted,  
Noah J. Ternullo et al., Applicants

Date: December 18, 2006

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